

REMARKS

This Amendment is fully responsive to the non-final Office Action dated May 12, 2009, issued in connection with the above-identified application. Claims 29, 30 and 32-56 are pending in the present application. With this Amendment, no claims have been amended, and no new matter has been introduced. Favorable reconsideration is respectfully requested.

In the Office Action, claims 29, 30, 32-37, 39-41, 43-49 and 50-55 have been rejected under 35 U.S.C. 103(a) as being unpatentable Guenebaud (U.S. Publication No. 2003/0012377, hereafter "Guenebaud") in view of Colman et al. (U.S. Publication No. 2002/0124193, hereafter "Colman"), and further in view of Borseth (U.S. Patent No. 6,340,997, hereafter "Borseth") and Hurst, Jr. (U.S. Patent No. 6,985,188, hereafter "Hurst"). The Applicants assert that the above cited prior art fails to disclose or suggest all the features recited in at least independent claims 29, 50, 51, 54 and 55.

Independent claim 29 recites the following features:

"[a] digital television receiver module for use in a digital television receiver for receiving a digital television signal, comprising:

a first connecting device having a plurality of terminals for electrically connecting to one external substrate among external substrates which can receive digital television signals of broadcasting systems different from each other;

a decoding device for executing a decoding processing on a digital television signal inputted from a demodulator provided on said external substrate via said first connecting device, so as to convert the digital television signal into a video signal and an audio signal, and for outputting the video signal and audio signal via said first connecting device;

a control device for controlling an operation of said digital television receiver module;

and

an interface device which is connected to one conditional access module among a plurality of types of conditional access modules having electrical specifications different from each other via said first connecting device, and which is connected to said demodulator, said decoding device, and said control device, said interface device executing input and output processings on a plurality of signals communicated among said demodulator, said conditional access module, said decoding device, and said control device,

wherein said control device controls said interface device by changing types and electrical specifications of at least one signal of a plurality of signals communicated via said first connecting device, so as to conform to electrical specifications of a connected conditional access module, in response to at least one of a broadcasting system of an inputted digital television signal and a type of said connected conditional access module; and said interface device comprises a plurality of buffers, and said control device controls on-off states of respective buffers in said interface device so as to control the input and output processings.” (Emphasis added).

The features emphasized above in independent claim 29 are similarly recited in independent claims 50, 51, 54 and 55.

The present invention (as recited in independent claims 29, 50, 51, 54 and 55) is directed to providing a module for DTV and a digital television set (DTV) comprising the same module. The module can connect decoders of devices common to respective countries with front-end circuits and CA (Conditional Access) modules that are made differently in the respective countries, but the module can be manufactured at a low cost and using a simple structure.

The present invention (as recited in independent claims 29, 50, 51, 54 and 55) is clearly distinguishable over the cited prior art in that an interface device comprises a plurality of buffers, and a control device controls on-off states of respective buffers so as to control the input and output processing. No such features of the present invention are believed to be disclosed or suggested by the cited prior art.

In the Office Action, the Examiner relies on a combination of Guenebaud, Colman, Borseth and Hurst for disclosing or suggesting all the features recited in independent claims 29, 50, 51, 54 and 55. However, the Examiner relies primarily on Hurst for disclosing or suggesting all the features of the claimed interface and control devices recited in independent claims 29, 50, 51, 54 and 55.

In particular, the Examiner relies on Fig. 2 of Hurst for disclosing an interface device that comprises a plurality of buffers and a control device that controls the on/off states of respective buffers.

Fig. 2 of Hurst is described in more detail at col. 5, lines 19-29 of the reference. Hurst at col. 5, lines 19-29 state that “[r]eceiver 200 includes dual-buffer MPEG decoder 10 and a tuner

and demultiplexer 140. Demultiplexer 140 receives an input from a signal source (RF antenna) 150 and provides a first output coupled to an input of the first VBV buffer 30 and a second output coupled to an input of the second VBV buffer 50.” However, there is no description in Hurst regarding data of broadcasting waves of different kinds that are stored in the VBV buffers 30, 50. Additionally, there is no mention in Hurst regarding on/off control of a plurality of buffers, or regarding control of on-off states of respective buffers to control input and output processing, as in the present invention (as recited in independent claims 29, 50, 51, 54 and 55).

Accordingly, Hurst fails to disclose or suggest at least the following features of the present invention (as recited in independent claims 29, 50, 51, 54 and 55):

“said interface device comprises a plurality of buffers, and wherein said control device controls on-off states of respective buffers so as to control the input and output processings.”

Therefore, even if Hurst is combined with Guenebaud, the combination cannot provide a module for DTV and a digital television set (DTV) comprising the same module, wherein the module can connect decoders of devices common to respective countries with front-end circuits and CA (Conditional Access) modules which are made differently in the respective countries, and can be manufactured at a low cost and using a simple structure. Moreover, Colman and Borseth fail to overcome the deficiencies noted above in Guenebaud and Hurst.

Based on the above discussion, even if one of ordinary skill in the art were to combine the teachings of Guenebaud, Colman, Borseth and Hurst, the combination still would not disclose or suggest all the feature recited in at least independent claims 29, 50, 51, 54 and 55. Accordingly, no combination of Guenebaud, Colman, Borseth and Hurst would result in, or otherwise render obvious, independent claims 29, 50, 51, 54 and 55. Likewise, no combination of Guenebaud, Colman, Borseth and Hurst would result in, or otherwise render obvious, claims 30, 32-37, 39-41, 43-49 and 52 and 53 at least by virtue of their respective dependencies from independent claims 29 and 50.

In the Office Action, claim 38 has been rejected under 35 U.S.C. 103(a) as being unpatentable over Guenebaud in view of Colman, and further in view of Borseth, Hurst and Candelore (U.S. Publication No. 2004/0228175, hereafter “Candelore”); claim 42 has been rejected under 35 U.S.C. 103(a) as being unpatentable over Guenebaud in view of Colman, and further in

view of Borseth, Hurst and Jensen et al. (U.S. Patent No. 6,603,080, hereafter "Jensen"); and claim 56 has been rejected under 35 U.S.C. 103(a) as being unpatentable over Guenebaud in view of Colman, and further in view of Borseth, Hurst and Sengupta et al. (U.S. Publication No. 2004/0228175, hereafter "Sengupta").

Claim 38 and 42 depend from independent claim 29; and claim 56 depends from independent claim 50. As noted above, Guenebaud in view of Colman, and further in view of Borseth and Hurst fails to disclose or suggest all the features of independent claims 29 and 50. Moreover, Candalore, Jensen and Sengupta fail to overcome the deficiencies noted above in Guenebaud, Colman, Borseth and Hurst. Accordingly, no combination of Guenebaud, Colman, Borseth and Hurst with Candalore, Jensen or Sengupta would result in, or otherwise render obvious, claims 38, 42 and 56 at least by virtue of their respective dependencies from independent claims 29 and 50.

In light of the above, the Applicants submit that all the pending claims are patentable over the prior art of record. The Applicants respectfully request that the Examiner withdraw the rejections presented in the outstanding Office Action, and pass this application issue.

The Examiner is invited to contact the undersigned attorney by telephone to resolve any remaining issues.

Respectfully submitted,

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